§ 749.3 Special Order Relating to the Incidental Take of Longfin Smelt (Spirinchus thaleichthys) During Candidacy Period

The Commission finds that, based on current knowledge and the protection and management efforts outlined in this regulation, including Exhibits A through E, the level of habitat loss and take of longfin smelt, which is likely to occur during the period that this regulation is in effect, will not cause an appreciable reduction in the species' ability to survive and reproduce.

- (a) Take Authorization
 - (1) Research and Monitoring
 - (A) Take of longfin smelt by Department personnel in the course of research and monitoring is authorized pursuant to Section 783.1(c), Title 14, CCR.
 - (B) Take of longfin smelt in the course of research and monitoring by public agencies and private parties is authorized subject to the following:
 - 1. For ongoing research, a written, detailed project proposal describing objectives, methods (gear, sampling schedules and locations), efforts to minimize adverse effects to the species, and estimated level of take of the species shall be provided to approved by the Regional Manager of the Bay Delta Region at the address specified in subsection (4) below within 45 days of this regulation becoming effective.
 - 2. For research which has not yet commenced, a written, detailed project proposal describing objectives, methods (gear, sampling schedules and locations), efforts to minimize adverse effects to the species, and estimated level of take of the species shall be provided to approved by the Regional Manager at the address specified in subsection (4) below.
 - 3. The research or monitoring may commence once the Department issues written concurrence that the research and monitoring activities conducted are consistent with the Department's research and monitoring programs and are sufficient to protect longfin smelt. The Department may specify additional terms and conditions for the protection of longfin smelt and the reporting of all data collected to the Department.
 - Regional Manager, Bay Delta Region, P.O. Box 47, Yountville, CA 94599 -- (707) 944-5500 (707) 944-5517.
 - (C) Notwithstanding the foregoing, at the discretion of the Department, research and monitoring activities not addressed by the above procedures may receive separate authorizations for take of longfin smelt pursuant to Fish and Game Code section 2081.

(2) Dredging and Extraction of Sand or Gravel Resources

Take of longfin smelt incidental to otherwise lawful dredging or extraction of sand or gravel resources in a stream or river is authorized for the longfin smelt candidacy period except any dredging activity in the Sacramento-San Joaquin Delta east of river kilometer 90 (Sherman Island) is prohibited during the effective period of this regulation provided that any activity already required to monitor and report the take of any fish species to the Department or a federal wildlife agency also include the following information weekly: the date, location, and number and length of any longfin smelt taken during the candidacy period. A copy of the report shall be mailed to: Regional Manager, Bay Delta Region, P.O. Box 47, Yountville, CA 94599 -- (707) 944-5500 (707) 944-5517.

(3) Local Water Diversions

Incidental take of longfin smelt resulting from diversion of water by any local agency, private party, or the State Water Project North Bay Aqueduct or Suisun Marsh facilities is authorized during the candidacy period subject to the following conditions:

- (A) Existing unscreened diversions of 250 cfs or more may continue in operation through the candidacy period if take authorization is requested and approved by the Regional Manager, Bay Delta Region at the address specified in subsection (D) below. Upon any future determination by the commission that longfin smelt shall be added to the list of threatened or endangered species, incidental take for such diversions must be authorized under Fish and Game Code Section 2081(b) or, if longfin smelt becomes listed pursuant to Section 1533 of Title 16 of the United States Code, be determined exempt from the permitting requirement under Fish and Game Code Section 2080.1.
- (B)Diversions approved and constructed after the effective date of this section shall be screened and shall use will be evaluated by the Department for the potential to take longfin smelt and may be required to install fish screens using the Department of Fish and Game Fish Screening Criteria for delta smelt (*Hypomesus transpacificus*) in Exhibit A as the fish screening criteria for longfin smelt.
- (C) Existing fish screens that are repaired, upgraded, or reconstructed during the candidacy period must screen for longfin smelt by meeting the Department of Fish and Game Fish Screening Criteria for delta smelt in Exhibit A.
- (D)Any activity already required to monitor and report the take of any fish species to the Department or a federal wildlife agency shall also include the following information weekly: the date, location, and number and length of any longfin smelt taken during the candidacy period. A copy of the report

shall be mailed to: Regional Manager, Bay Delta Region, P.O. Box 47, Yountville, CA 94599 -- (707) 944-5500 (707) 944-5517.

(4) State Water Project and Federal Central Valley Project Export Facilities

In Natural Resources Defense Council v. Kempthorne (Kempthorne), the United States Eastern District Court issued an Interim Remedial Order Following Summary Judgment and Evidentiary Hearing which required specific limitations on the joint operations of the State Water Project (SWP) and the Federal Central Valley Project (CVP) in order to prevent the extinction of delta smelt or destruction or adverse modification of its critical habitat until a new delta smelt biological opinion (BO) is issued by the United States Fish and Wildlife Service (FWS). The court has directed FWS to issue its new opinion by September December 15, 2008. When the new biological opinion is issued, the Kempthorne requirements will terminate. The Kempthorne requirements are triggered by environmental conditions and the presence of specific delta smelt life stages, and are focused on minimizing the negative entrainment effects caused when the combined export pumping of the SWP, operated by the Department of Water Resources (DWR) and the CVP, operated by the U.S. Department of the Interior, Bureau of Reclamation (Reclamation) reverses the flow in Old and Middle River (OMR). A series of The Kempthorne OMR flow requirements began in late-December 2007 and continued until June 20, 2008, sequentially targeting protecting adult delta smelt during migration prior to spawning, spawning delta smelt, larvae and juveniles.

The Commission recognizes that there are statistical correlations between negative OMR flows and take of different longfin smelt life stages, as there are for delta smelt. There is substantial overlap in the periods when the two species are taken by the SWP and CVP. However, adult longfin smelt can be taken a month or more earlier than delta smelt (potentially in December). Because longfin smelt typically spawn earlier than delta smelt, the larvae may be present earlier as well (potentially in February January). Consequently, concurrent take of both delta smelt and longfin smelt may include different life stages and magnitudes and Kempthorne requirements keyed to triggered by delta smelt presence may not match be protective of longfin smelt timing. The following measures will protect longfin smelt during the candidacy period when OMR limits required under Kempthorne for delta smelt may not be in effect or adequately protective. The Commission therefore authorizes take of longfin smelt incidental to the coordinated operations of the SWP and CVP export facilities subject to in-accordance with the following conditions OMR limits, or the conditions OMR limits set in Kempthorne or the BO when its issued, whichever are more protective of longfin smelt:

- (A) Monitoring for the presence of adult (>85 \geq 80 mm Fork Length (FL)), <u>iuvenile</u> (\geq 20 mm FL and \leq 80 mm FL), and larval longfin smelt (\leq 20 mm FL) shall be achieved as follows:
 - 1. For adults <u>and juveniles</u> by standard field sampling intervals, methods and locations of the <u>Department's</u> Fall Midwater Trawl Survey, the <u>Department's</u> San Francisco Bay Study Survey, and the <u>Department's</u> Spring Kodiak Trawl Survey, the <u>USFWS Chipps Island Trawl</u>, and salvage at the SWP and CVP.
 - 2. For larvae, and juveniles by the Department's Smelt Larva Survey sampling using a standard 500-micron mesh net beginning in the first two weeks of January by initiating the 20mm Survey beginning in the first two weeks of March and conducting single tows at sampling locations 405, 411, 418, 602, 501, 504, 519, 508, 513, 519, 520, 602, 606, 609, 610, 703, 704, 705, 706, 707, 711, 716, 705, 723, 801, 802, 804, 809, 812, 815, 901, 902, 906, 910, 912, 914, 915, 918, 919 (Exhibit D); In the last two weeks in March the full 20mm Survey will begin using standard survey protocol, sampling three tows per sampling location at all 41 standard locations. and continuing every other week until the Department's full 20mm Survey starts in the last two weeks of March.
 - 3. DWR and Reclamation shall ensure that <u>all longfin</u> smelt collected <u>counted</u> at the SWP and the CVP, respectively, are preserved in formalin or ethanol, labeled with the date and location of collection, and transferred to the Department's Bay-Delta Region Stockton office, 4001 N North Wilson Way, Stockton, CA 92405, within two-business days to the attention of Marty Gingras for a determination of sex and reproductive status (i.e., egg stage or spent). one week of collection. Identification of any larval adult or juvenile longfin smelt greater than 20mm in size collected counted at either facility shall be completed and the fish measured and reported within one two business days to Marty Gingras Robert Fujimura or Geir Aasen at the Department's Bay Delta Region Stockton office at the address specified above.
- (B) If any of the triggering conditions identified in (C) or (D) below are met and actions are required, the Smelt Work Group will convene each week to review all available data in preparation to make recommendations to the Water Operations Management Team (WOMT). The WOMT will discuss the recommendation and will either accept, modify or reject it. The Director of the Department will have the final approval for any actions. Recommendations may include that no action be taken.
- (C) Subject to (B) above, on or after December 1, 2008, DWR and Reclamation shall protect pre-spawning adult longfin smelt by coordinating operation of the SWP and the CVP to achieve a daily average net upstream (reverse)

 OMR flow not to exceed 5,000 cfs on a 14-day running average.

 Simultaneously, the 7-day running average shall be within 1,000 cfs of the applicable 14-day running average objective. The combined CVP and SWP

southern Delta diversions shall remain as stable as possible during the 14day period and shall not increase more than 1,000 cfs over the previous day's SWP and CVP southern Delta diversion on any day unless the projected daily OMR flow is above the targeted 14-day mean OMR flow. This action will begin when: (i) 8 or more adult longfin smelt are found in the December Fall Midwater Trawl Survey when sampling at stations 809, 810, 812, 813, 814, 815, 902, 903, 904, 905, 906, 908, 909, 910, 911, 912, 913, 914, or 915 (Exhibit B); or (ii) 8 or more adult longfin smelt are found in the December San Francisco Bay Study Survey when sampling at stations 863, 864, or 865 (Exhibit C); or (iii) the sum of SWP and CVP salvage of adult longfin smelt in December exceeds 24. This action shall be suspended any time the three-day average of flow in the San Joaquin River at Vernalis reaches or exceeds 8,000 cfs or Sacramento River at Rio Vista reaches or exceeds 55,000 cfs. The action shall be resumed when (1) the three-day average flow at Vernalis declines below 5,000 cfs or the Rio Vista flow declines below 40,000 cfs, whichever initiated the suspension, and (2) adult longfin smelt are again detected as described earlier in this paragraph. This action terminates upon implementation of the action set forth in D below or alternatively when the Department determines that the longfin smelt entrainment risk at each facility is abated.

(B) (D) Commencing on the effective date of this regulation Subject to (B) above, on or after January 1, 2009, DWR and Reclamation shall protect spawning, larval, and juvenile longfin smelt by jointly operating the CVP and SWP to achieve a daily average net upstream (reverse) OMR flow (as computed for Kempthorne compliance) between 750 and 5,000 cfs on a seven 14-day running average. Simultaneously, the 7-day running average shall be within 1,000 cfs of the applicable 14-day running average objective. The combined CVP and SWP southern Delta diversions shall remain as stable as possible during the 14-day period and shall not increase more than 1,000 cfs over the previous day's SWP and CVP southern Delta diversion on any day unless the projected daily OMR flow is above the targeted 14-day average OMR flow. This action will beginning begin when larval or juvenile longfin smelt spawning is indicated by: (i) the presence of spent female longfin-smelt (>85mm-FL) in the Spring-Kodiak Trawl (stations 809, 812, 815, 902, 906, 910, 912, 914, 915 on Exhibit B) or in the San Francisco Bay Study Otter Trawl or Midwater Trawl surveys (stations 863, 864, 865 on Exhibit C), all of which are located east or south of Jersey Point in the San Joaquin River, or south Delta channels or at either the SWP or CVP fish salvage facilities or (ii) when larval longfin smelt (<20mm FL) are detected in the 20mm Survey (stations 809, 812, 815, 901, 902, 906, 910, 912, 914, 915, 918 on Exhibit D) east or south of Jersey Point in the San Joaquin River or in south Delta channels or at the SWP or CVP fish salvage facility. are detected in a single Smelt Larva Survey sampling period at six or more of the following stations: 809, 812, 815, 901, 902, 906, 910, 912, 914, 915, 918, 919 (Exhibit D).

The specific biological flow objective within this range shall be set by the Department, after consultation with the FWS, DWR and Reclamation, to be determined on a weekly basis based upon a the Longfin Smelt Risk Assessment Matrix (LSRAM) (Exhibit E) to be refined by the Department in consultation with FWS, DWR, and Reclamation and the. Specific flow objectives will be based upon the best available scientific and commercial information concerning the distribution and status of longfin smelt and including an assessment of entrainment and population risk evaluated by the Smelt Work Group using the LSRAM. The LSRAM is patterned after the Delta Smelt Risk Assessment Matrix and is only modified to reflect longfin smelt biology and life stages and available information. This action is suspended during any time: (i) the three-day average of flow in the Sacramento River at Freeport Rio Vista exceeds 80,000 cfs 55,000 cfs or (ii) the three-day average of flow in the San Joaquin River at Vernalis reaches or exceeds 8,000 cfs or (iii) the distribution of larval longfin smelt and juvenile longfin smelt based on recent monitoring shows that increasingly negative OMR flows will not jeopardize the continued existence of the species. and is This action is resumed when (1) the three-day average Delta outflow flow at Vernalis falls below 5,000 40,000 cfs or Rio Vista flow declines below 40,000 cfs, whichever initiated the suspension, and (2) adult or larval or juvenile longfin smelt are again detected east or south of Jersey Point as described in the previous paragraph. above, or (ii) the Vernalis Adaptive-Management-Plan is being implemented (31-days, typically in mid-April to mid-May). This action shall continue until, in the reasonable discretion of the Department, after consultation with the Smelt Work Group, FWS, DWR, and Reclamation, the longfin smelt entrainment risk at each facility is abated, or November 24, 2008 whichever occurs first.

(C)(E) Notwithstanding the foregoing, this regulation shall not prevent DWR or Reclamation from taking any action in operating the projects that is reasonably necessary to protect human health or safety of the public, including, but not limited to, any act or omission reasonably necessary to protect the structural integrity of any SWP or CVP facility.

(D)(F) In the event DWR receives a permit from the Department pursuant to Fish and Game Code section 2081, which governs the take of longfin smelt, those requirements under Section 749.3(a)(4) which apply to DWR shall be superseded by the terms of such permit.

(E)(G)This emergency regulation shall be in effect for 90 days. It does not contain measures to protect pre-spawning-longfin smelt or their larvae after June 20, 2008 from the effects of project operations, which effects can occur as early as late November or early December 2008. If this regulation is extended, operational requirements for this December — February period may be added by amending this regulation prior to expiration or extension.